Clean Harbors of Wichita
2549 North New York Street
Wichita, KS 67219

May 16, 2012

Clean Harbors of Wichita
2549 North New York Ave.
Wichita, KS 67219

Certified mail number 7008 1830 0003 3581 6865

RE: Facility Contingency/Emergency Plan Acknowledgement letter

This letter is to acknowledge receipt of the updated Facility Contingency/Emergency Plan by the Via Christ Emergency Services.

Signature of recipient Date

Name of recipient and title

Clean Harbors of Wichita
2549 North New York Street
Wichita, KS 67219

May 16, 2012

City of Wichita Police Department
455 N. Main Street
Wichita, KS 67202

Certified mail number 7008 1830 0003 3581 6858

RE: Facility Contingency/Emergency Plan
Clean Harbors of Kansas LLC
EPA ID # KSD007246846

Dear Emergency Responder,

The Clean Harbors of Wichita Contingency Plan has been modified as part of the ongoing Part B permit renewal.

Please replace your present copy of the Clean Harbors of Wichita Contingency Plan with this version.

Please complete and return the attached Facility Contingency /Emergency Acknowledgement letter plan in the self addressed envelope included in this mailing.

If, after review of the information presented, you have any questions please feel free to contact Mr. Brian Key at 316-269-7400 or myself at 513-681-6242 ext. 6364.

Respectfully submitted

Stephen Bley
Regulatory Compliance Manager

Cc: File
Brian Key

Clean Harbors of Wichita
2549 North New York Street
Wichita, KS 67219

May 16, 2012

Clean Harbors of Wichita
2549 North New York Ave.
Wichita, KS 67219

Certified mail number 7008 1830 0003 3581 6841

RE: Facility Contingency/Emergency Plan Acknowledgement letter

This letter is to acknowledge receipt of the updated Facility Contingency/Emergency Plan by the City of Wichita Police Department.

Signature of recipient Date

Name of recipient and title

Clean Harbors of Wichita
2549 North New York Street
Wichita, KS 67219

May 16, 2012

Sedgwick County Emergency Medical Services
PO BOX 607
Wichita, KS 67201

Certified mail number 7008 1830 0003 3581 6834

RE: Facility Contingency/Emergency Plan
Clean Harbors of Kansas LLC
EPA ID # KSD007246846

Dear Emergency Responder,

The Clean Harbors of Wichita Contingency Plan has been modified as part of the ongoing Part B permit renewal.

Please replace your present copy of the Clean Harbors of Wichita Contingency Plan with this version.

Please complete and return the attached Facility Contingency /Emergency Acknowledgement letter plan in the self addressed envelope included in this mailing.

If, after review of the information presented, you have any questions please feel free to contact Mr. Brian Key at 316-269-7400 or myself at 513-681-6242 ext. 6364.

Respectfully submitted

Stephen Bley
Regulatory Compliance Manager

Cc: File
Brian Key

Clean Harbors of Wichita
2549 North New York Street
Wichita, KS 67219

May 16, 2012

Clean Harbors of Wichita
2549 North New York Ave.
Wichita, KS 67219

Certified mail number 7008 1830 0003 3581 6827

RE: Facility Contingency/Emergency Plan Acknowledgement letter

This letter is to acknowledge receipt of the updated Facility Contingency/Emergency Plan by the Sedgwick County Emergency Medical Services.

Signature of recipient Date

Name of recipient and title

Clean Harbors of Wichita
2549 North New York Street
Wichita, KS 67219

May 16,2012

Sedgwick County Local Emergency planning Committee
525 N. Main Street Room B-10
Wichita, KS 67202

Certified mail number 7008 1830 0003 3581 6803

RE: Facility Contingency/Emergency Plan
Clean Harbors of Kansas LLC
EPA ID # KSD007246846

Dear Emergency Responder,

The Clean Harbors of Wichita Contingency Plan has been modified as part of the ongoing Part B permit renewal.

Please replace your present copy of the Clean Harbors of Wichita Contingency Plan with this version.

Please complete and return the attached Facility Contingency /Emergency Acknowledgement letter plan in the self addressed envelope included in this mailing.

If, after review of the information presented, you have any questions please feel free to contact Mr. Brian Key at 316-269-7400 or myself at 513-681-6242 ext. 6364.

Respectfully submitted

Stephen Bley
Regulatory Compliance Manager

Cc: File
Brian Key

Clean Harbors of Wichita
2549 North New York Street
Wichita, KS 67219

May 16, 2012

Clean Harbors of Wichita
2549 North New York Ave.
Wichita, KS 67219

Certified mail number 7008 1830 0003 3581 6827

RE: Facility Contingency/Emergency Plan Acknowledgement letter

This letter is to acknowledge receipt of the updated Facility Contingency/Emergency Plan by the Sedgwick County Emergency planning Committee.

Signature of recipient Date

Name of recipient and title

Table of Contents

List of Appendices

Appendix I-A, Job Descriptions, Duties, and Training (Examples)
Appendix I-B, Introductory Training Seminar Outline
Appendix I-C, Example Introductory Training Seminar Test
Appendix I-D, Job-Specific Training Topics (Examples)

List of Acronyms

Clean Harbors Kansas, LLC (CHK)
Health, Safety and Training Manager (HSTM)
Material Safety Data Sheets (MSDS)

I-1 Outline of Training Program: 40 CFR 270.14(b)(12) and 270.16

This training program has been developed in accordance with the regulatory requirements of 40 CFR Parts 270 and 264. The program is designed to provide the information needed by Clean Harbors Kansas, LLC(CHK) personnel to assist them in understanding the processes and materials with which they are working and the potential safety and health hazards associated with those processes and materials. The training program also facilitates instruction of facility personnel in the proper procedures for preventing and reacting effectively to emergency situations. Where appropriate, the training program provides information regarding inspection, repair, and replacement of facility emergency equipment.

The goal of the training program is to train personnel to perform their job functions in an efficient and safe manner, and in compliance with applicable regulations and permit requirements.

I-1a Job Titles and Duties: 40 CFR 264.16(d)(1), (2) and (3)

As required in 40 CFR 264.16, records at the facility will include:

- the job titles for positions at the facility related to hazardous waste management,
- the names of the employees filling these jobs,
- a description of these jobs including duties, and
- a description of the minimum qualifications for employees filling these jobs.

The following are job titles that are most relevant to the compliant operation of CHK

- Facility Manager
- Operations Manager
- Laboratory Manager/Senior Chemist
- Laboratory Technician
- Facility Inspector
- Health, Safety and Training Manager
- Operator
- Operator Helper
- Secretary/clerk

Examples of typical job descriptions are contained in Appendix I-A, Typical Job Descriptions,

Duties, and Training. These job descriptions include a summary of the duties, qualifications, and training for the job titles listed above.

I-1b Training Content, Frequency and Techniques: 40 CFR 264.16(a)(3), 264.16(c) and 264.16(d)(3)

Initial training of facility employees will consist of:

- 24 hours of safety training as described by 29 CFR 1910.120(p)(7), for operations personnel,
- an introductory training seminar, and
- job specific training.

Each employee must complete the introductory training seminar prior to working without direct supervision in any hazardous waste management area at the facility. The introductory training seminar will last approximately sixteen (16) hours. The topics covered during this seminar include facility specific items such as the Contingency/Emergency Plan, as well as basic training in general topics such as chemistry and occupational safety. An outline of the seminar is provided in Appendix I-B, Introductory Training Seminar Outline. After completion of the

introductory training seminar, the employees will be tested to evaluate their comprehension of the information presented. An example of the type of test employees may be given is provided in Appendix I-C, Example Introductory Training Seminar Test.

In addition to the introductory training seminar, employees will be provided with job-specific training such as on-the-job training. The type and content of the job-specific training will depend on the skills and level of expertise demanded by the job. Appendix I-D, Typical Job-Specific Training Topics includes a list of typical topics for job-specific training that will be provided to the appropriate employees. The job-specific training completes the employee's initial training. Employees will not be allowed to perform unsupervised, hazardous waste management duties prior to completion of initial training.

Continuing training will be provided for employees performing certain jobs after the employee completes the initial training. At a minimum, the continuing training will consist of an annual review of the introductory training seminar.

Training techniques will vary depending on the subject. Typically, training techniques may involve classroom lecture, on-the-job, and audio/visual demonstration. Training instructors will

include personnel who have experience and/or training in that area and outside instructors such as manufacturer's representatives. On-the-job training is conducted by qualified facility personnel.

I-1c Director of the Training Program: 40 CFR 264.16(a)(2)

The Health, Safety and Training Manager (HSTM) will administer the training program. The duties and qualifications of the HSTM are provided in Appendix I-A. The duties of the HSTM include maintaining records that demonstrate that personnel are receiving the appropriate training in accordance with the training program. The minimum qualifications for the HSTM will be a college degree and/or equivalent experience with a knowledge of regulatory and safety requirements. The HSTM will be trained in hazardous waste management procedures.

I-1d Relevance of Training to Job Position: 40 CFR 264.16(a)(2)

It is important that employees be trained and possess a knowledge of the concepts required to perform their duties. Each employee engaged in hazardous waste management activities must be able to act correctly and safely while fulfilling job responsibilities.

In addition to the introductory training seminar that all employees will attend, relevant job-specific training will be provided to appropriate employees. For example, if an employee is in a supervisory or management position requiring an understanding of the Kansas rules for the management of hazardous waste, then the employee is trained accordingly. The job descriptions contained in Appendix I-A include examples of job-specific training that are relevant to the position. Appendix I-D contains outlines of typical topics for job-specific training.

I-1e Training for Emergency Action/Response: 40 CFR 264.16(a)(3)

The introductory training seminar includes training on the Contingency/Emergency Plan. Emergency action procedures are included in the Contingency/Emergency Plan. In accordance with 29 CFR 1910.120(p)(8) and CHK's Contingency/Emergency Plan, the facility may evacuate employees in the event of an emergency, and may not have a specially trained Emergency Response Team. The training topics provided during the seminar regarding the Contingency/Emergency Plan are provided in Appendix I-B. The seminar is designed to train employees to act appropriately during emergency situations.

In addition to the introductory training seminar, appropriate employees will receive job-specific

training on emergency procedures, equipment, and systems. Where applicable, this job-specific training will include:

- waste identification;
- waste processing procedures;
- instruction on machinery operation;
- procedures for the shutdown of operations;
- instruction on safety equipment;
- procedures for using, inspecting, repairing, and replacing facility emergency equipment;
- procedures for using the communications or alarm systems;
- procedures for fires or explosions; and
- procedures for incidents of potential soil or ground-water contamination.

I-2 Implementation of Training Program: 40 CFR 264.16(b), 264.16(d)(4) and 264.16(e)

The HSTM will monitor the training program to ensure that all employees complete their initial training and an annual review of the introductory training seminar. The initial training must be completed within six (6) months of either:

- initial employment,
- assignment to CHK if the individual is employed by Clean Harbors at the time of the assignment (unless equivalent training was received in his/her previous assignment), or
- transfer to a new position within the facility, if the employee has not previously received the appropriate training.

In the last two (2) cases, the employee will only be required to receive instruction in those portions of the initial training for which the employee has not yet been trained. For example, an employee who transfers from one position to another within CHK will not be required to repeat the introductory training seminar or any job-specific training the employee has already completed.

Records of the training provided to employees as part of the training program will be maintained

at the facility and on a corporate supported database. These training records will include:

- date of training,
- training topics,
- instructor's name,
- employees in attendance, and
- any test results, if appropriate.

Training records for current employees will be maintained until closure of the facility. Training records for former employees will be maintained for at least three (3) years from the date the employee last worked at the facility. Employee training records may accompany personnel transferred to CHK from another facility operated by Clean Harbors.

APPENDIX I-A

JOB DESCRIPTIONS, DUTIES AND TRAINING

(EXAMPLES)

JOB TITLE:	Facility Manager
JOB DESCRIPTION AND DUTIES:	Responsible for the safe and efficient management of operations at the facility. Approves the development of all records and manuals at the facility. Responsible for the enforcement of facility safety programs. Coordinates all facility operations with corporate office.
QUALIFICATIONS:	College degree and substantial experience in hazardous waste management. Knowledge of State and Federal Regulations dealing with hazardous waste management.
TRAINING:	Introductory training seminar, safety training, technical training, hazardous waste management training.

JOB TITLE:	Operations Manager
JOB DESCRIPTION AND DUTIES:	Responsible for the management of facility operations. Coordinates all material handling operations in the facility. Responsible for the enforcement of all safety programs. Assists in formulating all records and manuals at the facility. Assumes management of the facility as required.
QUALIFICATIONS:	College degree and/or experience in hazardous waste management operations including regulations.
TRAINING:	Introductory training seminar, operations training, safety training, technical training, hazardous waste management training.

JOB TITLE:	Laboratory Manager/Senior Chemist
JOB DESCRIPTION AND DUTIES:	Responsible for the routine operation of the laboratory including organizing and maintaining all laboratory records. Supervises technical employees to insure that all analyses are performed correctly and in a timely manner. Responsible for the analysis of incoming waste samples and designating the appropriate treatment and disposal for them. Participates in environmental monitoring as needed.
QUALIFICATIONS:	Degree in Chemistry or Physical Science which included a minimum of sixteen (16) hours of chemistry. A knowledge of chemistry and general laboratory experience such as would be acquired by four (4) years of academic study in the field of chemistry supplemented by at least three (3) years experience performing hands-on analytical laboratory chemistry work.
TRAINING:	Introductory training seminar, safety training, technical training, hazardous waste management training.

JOB TITLE:	Laboratory Technician
JOB DESCRIPTION AND DUTIES:	Responsible for the routine operation of the laboratory under the direction of the Senior Chemist. Performs analysis on pre-shipment samples. Assists in determining the designation of treatment and disposal of customer waste. Responsible for assisting in maintaining all laboratory records and inventory. Responsible for the collection and analysis of environmental samples.
QUALIFICATIONS:	Two (2) years college including a minimum of thirteen (13) college credit hours of chemistry plus other science related courses or a minimum of two (2) years laboratory experience.
TRAINING:	Introductory Training, First Aid and CPR, Continued Safety Training, Technical Training.

JOB TITLE:	Facility Inspector
JOB DESCRIPTION AND DUTIES:	Responsible for the timely and effective completion of all facility inspections. Maintains tank gauging records and all other regulatory inspection records for the facility.
QUALIFICATIONS:	One (1) year's experience in hazardous waste disposal operations.
TRAINING:	Introductory training seminar, operations training, safety training.

JOB TITLE:	Health, Safety and Training Manager
JOB DESCRIPTION AND DUTIES:	Formulates and implements facility Health and Safety Programs. Ensures that personal protection equipment is available for facility employees. Responsible for routine inspections of facility safety equipment. Responsible for the formulation of the facility Training Program. Responsible for keeping records of Health, Safety, and Training Programs that demonstrate compliance with Federal and State regulations.
QUALIFICATIONS:	College degree and/or equivalent experience working with State and Federal regulations, including OSHA regulations.
TRAINING:	Introductory training seminar, operations training, safety training, technical training, hazardous waste management training.

JOB TITLE:	Operator
JOB DESCRIPTION AND DUTIES:	Responsible for the assignment and effective completion of all field activities during a shift. Coordinates operations with area supervisors. Assists in the enforcement of company policy and safety regulations.
QUALIFICATIONS:	A minimum of one (1) year experience in industrial waste operation, including basic chemistry knowledge.
TRAINING:	Introductory training seminar, operations training, safety training.

JOB TITLE:	Operator Helper
JOB DESCRIPTION AND DUTIES:	Responsible for the effective and safe completion of all assigned facility operations under the direction of the Operations Manager and/or Operator.
QUALIFICATIONS:	Equipment/process experience preferred.
TRAINING:	Introductory training seminar, operations training, safety training.

JOB TITLE:	Secretary/clerk
JOB DESCRIPTION AND DUTIES:	Responsible for administrative support activities such as typing, answering the phone, filing and recordkeeping.
QUALIFICATIONS:	High school diploma or equivalent with office experience.
TRAINING:	Introductory training seminar.

APPENDIX I-B

EXAMPLE INTRODUCTORY-TRAINING SEMINAR OUTLINE

INTRODUCTORY-TRAINING SEMINAR OUTLINE

I. ORIENTATION: (2 hours)

1. Introduction
2. New Employee Communication Checklist
3. Company History
4. Facility Tour

II. REVIEW OF OPERATIONS: (4 hours)

1. General Facility Description
2. Contingency Plan
   - Contingency plan implementation procedures
   - Access and use of communication and alarm systems
   - Response to fires, explosions, spills and/or releases
   - Site evacuation procedures

III. CHEMICAL TRAINING: (2 hours)

Basic understanding of the characteristics of acids, caustics, and solvents

1. Basic Chemistry
2. Incompatible Wastes

IV. SAFETY TRAINING: (4 hours)

Facility safety requirements and emergency equipment including location and capabilities

1. Facility Housekeeping
2. Job Specific Safety Equipment
3. Eye & Face Safety
   - Equipment location, inspection, repair and operation

4. Respiratory Protection
   - Equipment location, inspection, repair and operation
5. Emergency Equipment
   - Equipment location, inspection, repair and operation

V. INTRODUCTORY JOB-SPECIFIC TRAINING: (RCRA) (4 hours)

1. Office Procedures - (Clerical & Technical Personnel)
   - Telecommunication System
   - Load Arrival Procedures
   - Filing System
   - Log Maintenance

2. Technical Training - (Laboratory and Supervisory Personnel)
   - Office Procedures
   - Load Arrival Procedures
   - Truck Sampling Procedures

3. Operational Training - (Operations Personnel)
   - Review Job Description
   - Truck Unloading Procedures
   - Equipment Operation

VI. Clean Harbors INITIAL TRAINING TEST: (RCRA) (30 minutes)
See Appendix I-C for example test

APPENDIX I-C

EXAMPLE INTRODUCTORY TRAINING SEMINAR TEST

EXAMPLE INTRODUCTORY TRAINING SEMINAR TEST

1) What safety gear is required for general facility activities?

2) Who is responsible for facility housekeeping and why?

3) When and where should you wear eye protection?

4) When is it necessary to wear a face shield?

5) What areas are designated for "SMOKING"?

6) How do you gain access to the loud speaker system?

7) What is the "EMERGENCY NOTIFICATION LIST"?

8) Where are the "EYEWASH STATIONS" in your work area and how do they operate?

9) When and why should you have respiratory protection?

10) What are some of the dangers associated with acids?

11) Can "fumes" be dangerous to your health?

12) What is a Contingency Plan and where is it located?

13) What are the two kinds of "EMERGENCY ALARMS"?

14) What is the proper procedure for reporting a fire?

15) Where are the gathering points in case of an evacuation?

16) Name the location of a fire extinguisher in your work area?

17) What is the "BUDDY SYSTEM" and why is it used?

18) What is the best defense against injury?

APPENDIX I-D

JOB-SPECIFIC TRAINING TOPICS

(EXAMPLES)

TYPICAL JOB-SPECIFIC TRAINING TOPICS

OPERATIONS TRAINING:

- Site Security
  - Security procedures and equipment
- Procedures for using, inspecting, repairing, and replacing facility emergency and monitoring equipment
- Preparedness and Prevention
  - Access to and use of internal communications and alarm systems
  - Access to and use of telephone for summoning off-site help
  - Access to and use of portable fire extinguishers, spill control equipment, and decontamination equipment
  - Access to and use of firewater system
  - Shut down of operations
- Contingency/Emergency Plan
  - Contingency/Emergency Plan implementation procedures
  - Access and use of communications and alarm systems
  - Response to fires, explosions, spills, groundwater contamination, and air emissions
  - Site evacuation procedures
  - Job-specific use and maintenance of emergency equipment
- Hazard Communication Manual
  - Right-to-Know
  - Material Safety Data Sheets (MSDS)
- Tank Operation and Controls
  - Site procedures and 40 CFR Part 264, Subpart J
- Use and Management of Containers
  - Site procedures and 40 CFR Part 264, Subpart I

SAFETY TRAINING:

- Industrial Hygiene and Decontamination Procedures and policies for decontamination
- Protective Equipment
  - Job-specific Protective Equipment
- First Aid - General Information
  - Wound and burn management
- Care in Handling Waste
  - Procedures for safety in handling and treating wastes
- Loading and Unloading of Trucks
  - Site procedures for trucks
- Specialized Equipment Operation
  - Procedures for operation and maintenance of heavy equipment
- Basic Chemistry
  - Safety in handling chemicals

TECHNICAL TRAINING:

- Updating of Waste Stream Approvals
  - Customer profile updates
- Manifest Systems
  - Proper manifest preparation
- Records
  - Site-specific records system
- Sampling and Approval Procedures
  - Procedure for sampling trucks properly and waste stream approval
- Waste Identification and Segregation
  - Procedures for identifying and handling incompatible materials

HAZARDOUS WASTE MANAGEMENT TRAINING

- Overview of RCRA hazardous waste management regulations
- Proper characterization and identification of hazardous wastes
- Land Disposal Restrictions
- Overview of DOT hazardous waste management regulations

Table of Contents

List of Figures

List of Tables

Note: Tables are presented in Appendix J-A

List of Appendices

List of Referenced Drawings

Acronym Table

Clean Harbors Kansas, LLC (CHK)
Treatment, Storage, or Disposal Facilities (TSDFs)
Title 40 of the Code of Federal Regulations (40 CFR)
Hazardous Waste Management Units (HWMUs)
National Priorities List (NPL)
Potentially Responsible Party (PRP)
Kansas Department of Health and Environment (KDHE)
Toxic Characteristic Leaching Procedure (TCLP)
Container Management Unit (CMU)
Toxic Characteristic Leaching Procedure (TCLP)

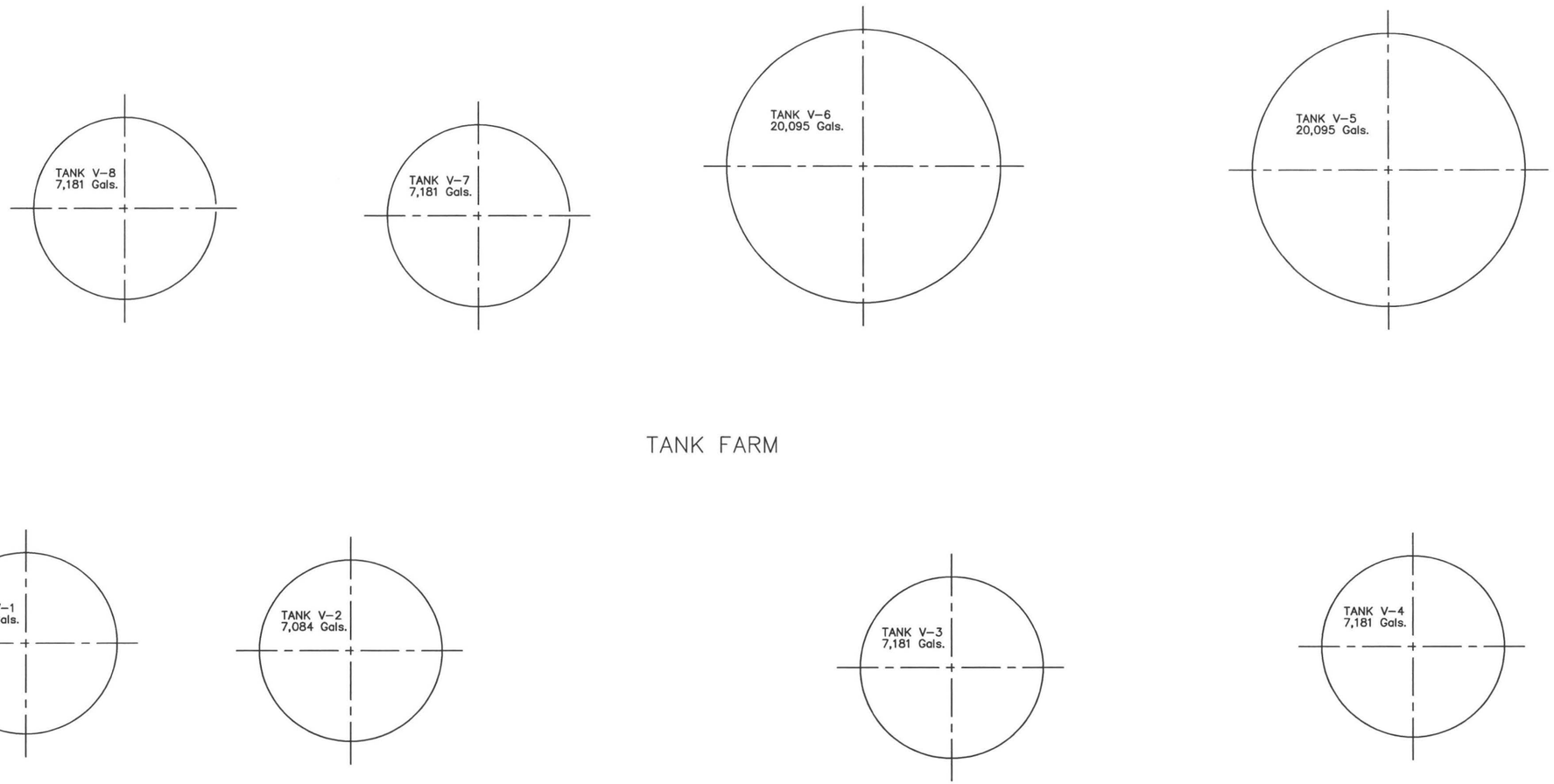


FIGURE J-2

REV.	DESCRIPTION	DRAWN BY	DATE	APPR. BY
A	RCRA PART B SUBMITTAL	K.M.C.	6/20/08	M.C.

REFERENCE DRAWINGS

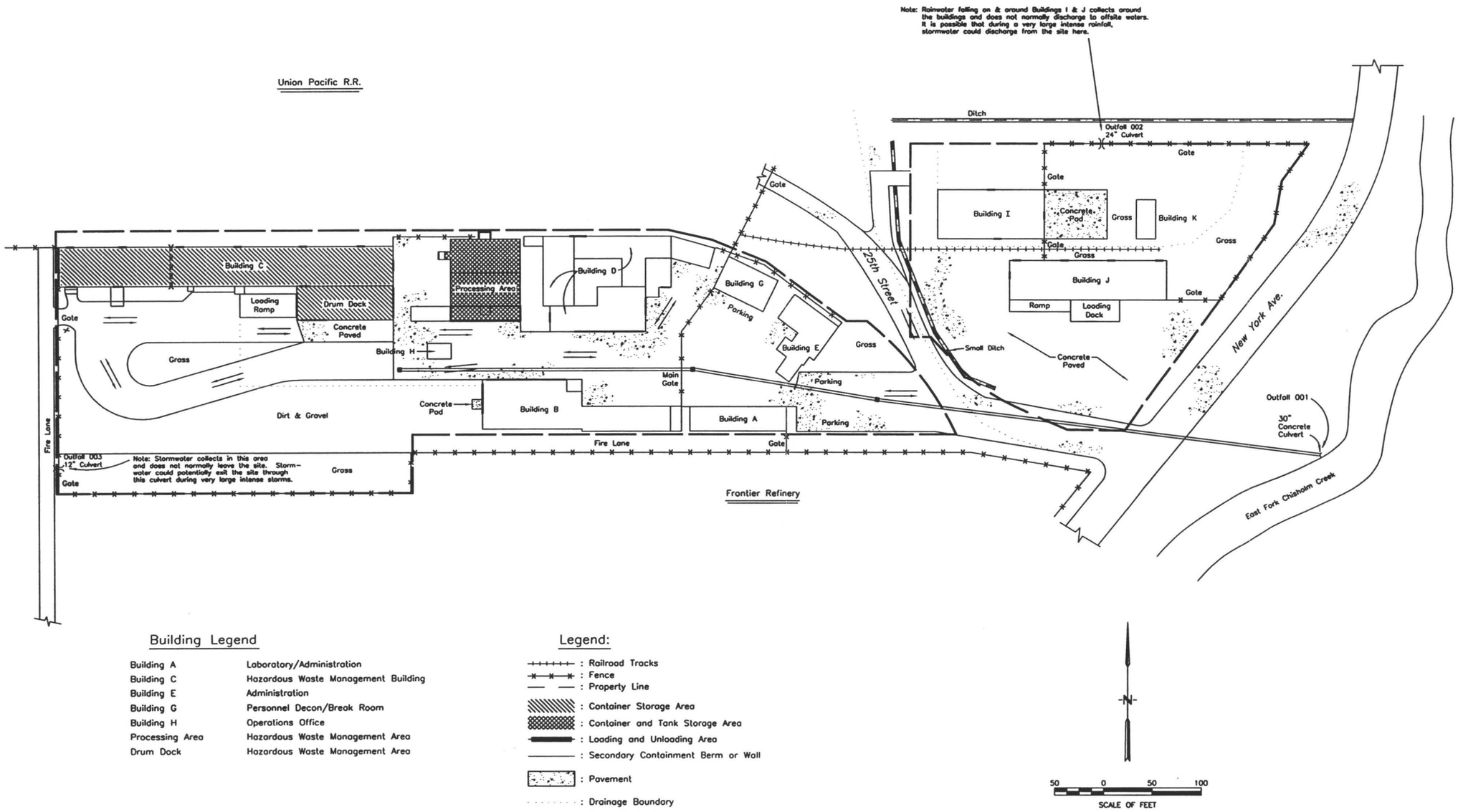
CleanHarbors

DRAWN	CHECKED	SCALE	DATE
K.M.C.	M.C.	3/8"=1'-0"	06/17/08

TITLE
CLEAN HARBORS KANSAS, LLC
WICHITA FACILITY
TANK FARM1/2 TANK LOCATIONS

DRAWING NO. TKFRM1/2-W511-1

REV. A



Building Legend

Building A	Laboratory/Administration
Building C	Hazardous Waste Management Building
Building E	Administration
Building G	Personnel Decon/Break Room
Building H	Operations Office
Processing Area	Hazardous Waste Management Area
Drum Dock	Hazardous Waste Management Area

Legend:

- : Railroad Tracks
- : Fence
- : Property Line
- : Container Storage Area
- : Container and Tank Storage Area
- : Loading and Unloading Area
- : Secondary Containment Berm or Wall
- : Pavement
- : Drainage Boundary
- : Storm Drain Catch Basins
- : Underground Storm Sewer Line
- : Truck Routes

N

50 0 50 100

SCALE OF FEET

FIGURE J-1

REV.	DESCRIPTION	DRAWN BY	DATE	APPR. BY
A	RCRA PART B SUBMITTAL	K.M.C.	6/20/08	M.C.

REFERENCE DRAWINGS

CleanHarbors

TITLE: CLEAN HARBORS KANSAS, LLC
WICHITA FACILITY
HAZARDOUS WASTE MANAGEMENT AREAS

DRAWN	CHECKED	SCALE	DATE
K.M.C.	M.C.	AS NOTED	04/01/08

DRAWING NO. HWMA — REV. A

J-1 Introduction

This plan describes the activities to be performed at Clean Harbors Kansas, LLC at the time of facility closure; it addresses final facility closure.

The facility stores hazardous and nonhazardous wastes. Clean Harbors Kansas, LLC blends BTU containing materials for beneficial use and energy recovery as cement kiln fuel. CHK also stores, processes, and/or manages waste solvents, sludges, solids, and water for subsequent shipment to other permitted Treatment, Storage, or Disposal Facilities (TSDFs) for distillation, beneficial reuse, further treatment or disposal. Clean Harbors Kansas, LLC also stores waste solvent, hydrocarbons, paint-related waste streams, solids, corrosive waste streams, and water-based waste streams. Storage occurs in both containers and tanks. (For a more complete description of activities at Clean Harbors Kansas, LLC, see Section B, Facility Description.) The facility operates under EPA I.D. No. KSD007246846.

The Clean Harbors Kansas, LLC facility does not include disposal units. Also, all tank systems are equipped with secondary containment meeting the requirements of Title 40 of the Code of Federal Regulations (40 CFR) 264.193 (b) through (f). Therefore, the facility is subject to neither the post-closure care requirements of 40 CFR 264.116 through 264.120, nor the contingent post-closure plan requirements of 40 CFR 264.197(c). In the event clean closure cannot be achieved, a post closure plan will be submitted to KDHE.

J-2 Hazardous Waste Management Units to be Closed

The Clean Harbors Kansas, LLC facility's existing hazardous waste management units are summarized in Table J.1, Maximum Extent of Operations - Clean Harbors Kansas, LLC - Hazardous Waste Management Units, presented in Appendix J-A, Tables. Specific descriptions of container management units and tank systems are located in Sections D (Container Management) and E (Tank Management) respectively.

J-3 Closure Performance Standard

Clean Harbors Kansas, LLC will close each hazardous waste management unit and/or the entire facility in a manner that minimizes the need for further maintenance, and controls, minimizes, or eliminates (to the extent necessary to protect human health and the environment) post-closure escape of hazardous waste, hazardous constituents, contaminated run-off, or hazardous waste decomposition products to the ground or surface waters or to the atmosphere.

Clean Harbors Kansas, LLC will meet this performance standard by removing all hazardous wastes and hazardous waste constituents to acceptable levels (see Section J-4a).

Prior to use,a representative sample of the tap water utilized in the clean up, will be analyzed as a blank for the same parametyers as the closure samples. If KDHE approves the use of this water, corresponding detectable chemicals of concern from compound table in Appendix J-Amay be deducted from the analytical results from each final rinse sample as correction factors (e.g. if tap water sample has 0.1 ug/l 2,4,-D and the rinse water is 0.2 ug/l 2,4,-D, we would subtract 0.1ug/l from the rinse water and get a final value of 0.1ug/l 2,4-D) Use of tap water analytical results as correction factors is subject to prior KDHE approval

Analyte	**Analytical Method**
27 metal compounds	Various SW846 methods
Volatile organic compounds	EPA 8260
Semivolatiles	EPA 8270
Organochlorine pesticides	EPA 8081/8082

A detail analyte list is located in, Appendix J-A Laboratory Analytical Method Detection Limits (MDL) –of Appendix J-C

All containers, tanks, miscellaneous units, piping, and other ancillary parts to the systems will be closed in one of the following ways:

1. They will be dismantled and disposed as hazardous waste at a RCRA/HSWA permitted off-site disposal facility.

2. They will be decontaminated in accordance with the procedures discussed in Section J-4a and disposed at a solid waste landfill.

3. They will be decontaminated sufficiently to be salvaged for future use.

4. They will be transferred for use at another RCRA facility.

All permanent structures (e.g., concrete containment systems) will be closed in one of the following ways.

1. They will be dismantled and disposed as hazardous waste at a RCRA/HSWA permitted off-site disposal facility.

2. They will be decontaminated in accordance with the procedures discussed in Section J-4a and disposed at a solid waste landfill.

3. They will be decontaminated in accordance with the procedures discussed in Section J-4a and maintained in place for future use.

All analyses performed to verify that closure performance standards are met shall be performed at a laboratory certified by the state of Kansas for the specific analytical procedures used.

J-3a Establishment of Cleanup Standards

Clean Harbors Kansas, LLC will close the subject Hazardous Waste Management Units (HWMUs) by removal of the waste so that there will not be any need for post-closure monitoring and maintenance of the units. In the event clean closure cannot be achieved, a post closure plan will be submitted to KDHE.

Since all units at Clean Harbors Kansas, LLC have secondary containment, any leaks, spills, drips, etc. will have been contained, removed, and cleaned up in accordance with the operating conditions of this permit.

The property on which the Clean Harbors Kansas, LLC facility is located is included within the boundaries of the North Industrial Corridor (NIC) Comprehensive Environmental Response, Compensation, and Liability Act or "Superfund" Site in Wichita, Kansas. The NIC Superfund Site is listed on the National Priorities List (NPL). Reid Supply Company has been named a Potentially Responsible Party (PRP) in the NIC Site. In 1986, Conservation Services, Inc. purchased certain assets, including the permit (operating under EPA I.D. #KSD007246846), from Reid Supply Co., Inc. Subsequently, Hydrocarbon Recyclers, Inc. of Wichita acquired the capital stock of Conservation Services, Inc. in 1987. Clean Harbors Kansas LLC acquired the site in 2002. The Reid Supply Company property functioned as storage, recycling, and collection point for hazardous waste material and as a bulk chemical repackaging and distribution center since the 1970s.

The NIC site is located in a heavy industrial area and has evolved over an approximately 95 year time span. Current industry includes, but is not limited to, chemical supply companies, grain elevators, railroad facilities, metal fabricating companies, foundries, refineries, meat processing companies, recyclers/salvage facilities, roofing companies, concrete companies, food processing companies, and gasoline retailers.

Past investigations, including one performed by Groundwater Technology, Inc., have indicated the presence of soil and groundwater contamination.

Soil will be considered clean for closure when results of sample analyses are at or below the Tier 2 risk based standards for non-residential soil pathway or the Residential Soil to Ground Water pathway, whichever is lower, found in KDHE's guidance document, "Risk Based Standards for Kansas (RSK)" 2010

Because the scope and extent of future site remediation is unknown, this closure plan will address only potential contamination which resulted from hazardous waste management at Clean Harbors Kansas, LLC. Consequently, all areas where evidence of visible contamination exists and areas beneath regulated units and secondary containment will be evaluated and

closed in accordance with J-4a of this closure plan.

During facility operations under this permit application, hazardous waste management areas are covered and have secondary containment that includes diking. These controls minimize precipitation run-on and run-off and will subsequently be maintained during closure. These structures will not be removed until after all associated hazardous waste management units are decontaminated; or, if demolition is required, other practical methods will be implemented to control run-on and run-off.

Because the Clean Harbors Kansas, LLC facility does not contain waste piles or surface impoundments, and the facility is not a disposal facility, other activities such as groundwater monitoring and leachate collection are not applicable as part of closure.

J-4 Partial Closure and Final Closure Activities

Partial facility closure (i.e., closure of individual hazardous waste management units) may be necessary during the active life of the facility. If partial closure is necessary, the individual hazardous waste management unit would be closed in accordance with Section J-9 of this closure plan. Currently CHK is the process of closing buildings B, D, and J as described in Appendix J-C.CHK plans to close the remaining hazardous waste management units during the final facility closure. Clean Harbors Kansas, LLC will close the facility in accordance with the following procedures.

1. Clean Harbors Kansas, LLC has notified the Kansas Department of Health and Environment (KDHE) or the United States Environmental Protection Agency (USEPA), Region 7, Administrator per this submittal.

2. If modifications to this closure plan are desired and have not been previously approved in accordance with 40 CFR 270.42 and 264.112, the modified portions of the plan will not be implemented until approval by KDHE or other authorized agencies has been received.

3. Clean Harbors Kansas, LLC will complete closure activities within 180 days after receiving closure plan approval from KDHE, unless an extension has been requested and approved in accordance with 40 CFR 264.113(b).

4. Clean Harbors Kansas, LLC will close the facility in accordance with the schedule discussed in Section J-7 and outlined in Table J.3, Closure Activity Schedule - Facility Closure, of this closure plan.

5. The container management units will be closed in accordance with Section J-9a of this closure plan. The tank and miscellaneous systems will be closed in accordance with Section J-9b of this plan.

6. All contaminated equipment and structures will be either properly disposed as hazardous waste or decontaminated in accordance with Section J-4a of this closure plan. After decontamination, equipment (such as conveyers) and structures may be salvaged for future use.

7. All wastes generated from closure activities will be handled in accordance with Section J-4b of this closure plan.

8. The Clean Harbors Kansas, LLC facility does not contain disposal units. All tank systems have secondary containment meeting the requirements of 40 CFR 264.193 (b) through (f). Also, all hazardous wastes and hazardous waste constituents will be removed from the facility during final closure and all structures will be decontaminated in accordance with this closure plan. If clean closure is not achieved, facility will submit a post-closure plan to the regulatory authority.

9. Clean Harbors will inform KDHE and EPA two weeks before closure activities are initiated. Confirmation samples (soil, final rinse water) must be collected in the presence of KDHE/EPA personnel and a Kansas Professional Engineer.

10. Within 60 days of closure completion, Clean Harbors Kansas, LLC will submit, either by hand delivery or by registered mail, a certification of closure and a closure report, to KDHE and the Regional Administrator of the USEPA, Region 7. The certification will be signed by CHK, as the owner/operator of the facility and by an independent Kansas registered professional engineer attesting that the units were closed in accordance with this closure plan.

11. Closure activates will be conducted in accordance with KDHE approved closure-specific work plans, sampling and analysis plans and quality assurance project plans.

J-4a Disposal or Decontamination of Equipment, Structures and Soils

During the partial and final closure periods, all contaminated equipment and structures will be either properly disposed of or decontaminated.

J-4a (1) Soils

During closure operations, the soil beneath containment systems of all hazardous waste management units will be investigated as follows.

1. Each management unit containment area will be mapped with a grid system. A 25' x 25' grid will be used in material storage areas and a 15' x 15' grid will be used in material processing areas. A soil sample will be taken in the center of each grid. If necessary, concrete borings will be done to sample each required location. Additionally, if a crack exists, a sample will be collected under the crack every 10'. (Note: This does not apply to surface cracks) A sample will also be collected under every sump.

2. Collect samples at soil interface beneath the concrete surface and below the underlying subgrade rock where rock exists, and analyze using SW-846 standard methods for the parameters identified in Appendix A. Borings for soil samples in non active containment areas will remain open until any additional sampling required by the EPA or KDHE for closure or corrective action purposes at that location has been completed.

4. Proper QA/QC procedures will be followed to control the potential loss of VOCs during sampling and transport.

5. For closure, soil will be considered clean for closure when results of sample analyses are at or below the Tier 2 risk based standards for non-residential soil pathway ,or the Residential Soil to Ground water pathway, whichever is lower found in KDHE's guidance document, "Risk Based Standards for Kansas (RSK)", 2010.

6. If large areas of soil contamination, in excess of closure standards, are identified, a project specific assessment and cleanup plan will be prepared and submitted to the KDHE for approval and subsequent implementation. This will be done in accordance with the permit modification procedures of 40 CFR 270.42. Alternatively, this may be addressed in the site's corrective action program if formally deferred to the corrective action process by the regulatory agencies.

7. KDHE can ask for additional soil samples at any location and depths within the regulatory unit, if staining of soil or other indications of contamination are present.

J-4a (2) Hazardous Waste Management Units (HWMUs)

Decontamination procedures for hazardous waste management units (i.e., tank systems and container storage units) are discussed in the following paragraphs. Specific procedures are outlined based on configuration of the equipment. "Exposed surfaces" are external surfaces and those internal surfaces that are readily scraped, sandblasted, brushed, or swept (i.e., accessible to standard techniques for removal of residual materials).

J-4a (2) (a) HWMUs with no internal or complicated external parts

All tank systems, miscellaneous units, container management units, and their associated secondary containment system components and ancillary equipment will be decontaminated as follows (unless the unit has internal and/or complicated external parts exposed to waste).

1. Surfaces will be scraped, sandblasted, brushed, or swept to remove all loose or caked residue. Surfaces will then be triple rinsed. The first wash/rinse will be performed with a high-pressure stream of steam or water with suitable detergents or other cleaning additives. The second wash/rinse will be performed using clean water with cleaning additives. Accumulated liquids from the two first washes will be collected and handled in accordance with Section J-4b of this closure plan. The third wash/rinse will be performed with clean (potable) water.

2. The equipment will be visually inspected after the triple wash/rinse to assess the presence of visible residue. If necessary, the facility will repeat all, or part, of the above procedures.

3. A representative sample will be taken of the rinse water from the final rinse of each hazardous waste management unit. These samples will be analyzed for total concentrations of all constituents identified in J-3.The constitutions in J-3 are broken down further by compound in Appendix A – Laboratory Analytical Method Detection Limit (MDL) located in Appendix J-C of this section.

4. Prior to use, a representative sample of the tap water utilized in the clean up, will be analyzed as a blank for the same parameters as the closure samples. If KDHE approves the use of this water, corresponding detectable chemicals of concern from compound table in Appendix J-A may be deducted from the analytical results from each final rinse sample as correction factors (e.g. if tap water sample has 0.1 ug/l 2,4,-D and the rinse water is 0.2 ug/l 2,4,-D, we would subtract 0.1ug/l from the rinse water and get a final value of 0.1ug/l 2,4-D) Use of tap water analytical results as correction factors is subject to prior KDHE approval

5. A unit will be considered decontaminated when the rinsate sample analysis results are lower than the Tier 2 risk based standards for non-residential ground water found in KDHE's guidance document, "Risk Based Standards for Kansas (RSK)", 2010 or the analytical detection level if there is not a corresponding RSK standard.

6. If the unit is not decontaminated after performing Steps 1 through 5, the facility will either repeat the above procedures or dismantle the unit for further management and/or disposal at an off-site permitted TSDF as a hazardous waste. Equipment disposed in a landfill will meet the applicable Land Disposal Restriction (LDR) standards of 40 CFR 268.

J-4a (2) (b) HWMUs with internal or complicated external parts

Any miscellaneous unit or tank system with external or complicated internal parts exposed to wastes will be decontaminated as follows.

1. Exposed surfaces (i.e. building walls, floors) will be scraped, sandblasted, brushed, or swept to remove all loose or caked residues. Surfaces will then be triple rinsed. The first wash/rinse will be performed with a high-pressure stream of steam or water with suitable detergents or other cleaning additives. The second wash/rinse will be performed using clean water with cleaning additives. Accumulated solids and liquids from the two first washes will be handled in accordance with section J.4b of this closure plan. The third wash/rinse will be performed with clean water.

2. The equipment will be visually inspected after the triple wash/rinse to assess the presence of visual residue. If necessary the facility will repeat all, or part, of the above procedures.

3. If visible contamination remains, go to Step 6 below. If no visible contamination remains, a representative sample will be taken of the rinse water from the final rinse of each hazardous waste management unit. These samples will be analyzed for total concentrations of all constituents identified in J-3. .The constitutions in J-3 are broken down further by compound in Appendix A – Laboratory Analytical Method Detection Limit (MDL) located in Appendix J-C of this section.

4. Prior to use,a representative sample of the tap water utilized in the clean up, will be analyzed as a blank for the same parametyers as the closure samples. If KDHE approves the use of this water, corresponding detectable chemicals of concern from compound table in Appendix J-Amay be deducted from the analytical results from each final rinse sample as correction factors (e.g. if tap water sample has 0.1 ug/l 2,4,-D and the rinse water is 0.2 ug/l 2,4,-D, we would subtract 0.1ug/l from the rinse water and get a final value of 0.1ug/l 2,4-D) Use of tap water analytical results as correction factors is subject to prior KDHE approval

5. A unit will be considered decontaminated when the rinsate sample analysis results are lower than the Tier 2 risk based standards for non-residential ground water found in KDHE's guidance document, "Risk Based Standards for Kansas (RSK)", 2010 or the analytical detection level if there is not a corresponding RSK standard.

6. If, after performing the above rinsing procedures, the equipment can not be decontaminated, the equipment will be transported by a licensed/permitted hauler to an off-site, permitted TSDF for further treatment or disposal. Equipment disposed in

a landfill will meet the applicable Land Disposal Restriction (LDR) standards of 40 CFR 268.

J-4a (3) Closure of Miscellaneous Handling Equipment

A wide variety of equipment on site may be used for hazardous waste management. Equipment that has been in contact with hazardous waste will be decontaminated during closure activities. Equipment which may require decontamination during closure includes (but is not limited to) industrial trucks, drum dollies, handcarts, conveyers, augers, and other material transfer equipment, as well as hand tools such as shovels, brushes, scrapers, etc. During final facility closure, this equipment will be closed in one of the following ways:

- For closure of small equipment (such as hand tools), if visible contamination exists, the equipment will be dismantled and disposed of as hazardous waste at a RCRA/HSWA permitted off-site disposal facility,

- For closure of all equipment (including hand tools), if visible contamination exists, equipment will be decontaminated and disposed of at a solid waste landfill. If evidence of contamination exists after decontamination, the equipment will be transported by a permitted/licensed hauler to a permitted RCRA/HSWA off-site TSDF for further treatment or disposal, or

- For closure of all equipment (including hand tools), if visible contamination exists, equipment will be decontaminated sufficiently to be salvaged for future use and potentially transferred for use at another RCRA facility.

J-4a (3) (a) Decontamination of small miscellaneous handling equipment

All hand tools and equipment without internal or complicated external parts will be

decontaminated in accordance with the following procedures.

1. Surfaces will be scraped, sandblasted, brushed, or swept to remove all loose or caked residues. Surfaces will then be rinsed with a high-pressure stream of steam or water, possibly with suitable detergents or other cleaning additives, until either all visible contamination is removed, or until further removal is not feasible. All accumulated solids and liquids will be handled in accordance with section J-4b of this closure plan.

2. The equipment will be visually inspected for evidence of visible contamination.

3. The equipment will be considered decontaminated when no visible evidence of contamination exists.

4. If visible evidence of contamination remains and cannot be removed, the equipment will be disposed of as a hazardous waste.

J-4a (3) (b) Decontamination of large miscellaneous handling equipment with no internal or complicated external parts

All large equipment with no internal or complicated external parts will be decontaminated as follows.

1. Surfaces will be scraped, sandblasted, brushed, or swept to remove all loose or caked residue. Surfaces will then be triple rinsed. The first wash/rinse will be performed with a high-pressure stream of steam or water with suitable detergents or other cleaning additives. The second wash/rinse will be performed using clean water with cleaning additives. Accumulated solids and liquids from the two first washes will be handled in accordance with section J.4b of this closure plan. The third wash/rinse will be performed with clean water.

2. The equipment will be visually inspected after the triple wash/rinse to assess the presence of visual residue. If necessary, the facility will repeat all, or part, of the above procedures.

3. A representative sample will be taken of the rinse water from the final rinse of each

hazardous waste management unit. These samples will be analyzed for total concentrations of all constituents identified in J-3. The constitutions in J-3 are broken down further by compound in Appendix A – Laboratory Analytical Method Detection Limit (MDL) located in Appendix J-C(closure plan for buildings B, D, and J) .

4. Prior to use, a representative sample of the tap water utilized in the clean up, will be analyzed as a blank for the same parameters as the closure samples. If KDHE approves the use of this water, corresponding detectable chemicals of concern from compound table in Appendix J-A may be deducted from the analytical results from each final rinse sample as correction factors (e.g. if tap water sample has 0.1 ug/l 2,4,-D and the rinse water is 0.2 ug/l 2,4,-D, we would subtract 0.1ug/l from the rinse water and get a final value of 0.1ug/l 2,4-D) Use of tap water analytical results as correction factors is subject to prior KDHE approval

5. Except in cases where the Hazardous Waste Debris Rule applies, the equipment will be considered decontaminated when the rinsate sample analysis results are lower than the Tier 2 risk based standards for non-residential ground water found in KDHE's guidance document, "Risk Based Standards for Kansas (RSK)", 2010 or the analytical detection level if there is not a corresponding RSK standard.

6. If the unit is not decontaminated after performing Steps 1 through 5, the facility will either repeat the above procedures or dismantle the unit and transport it by a licensed/permitted hauler to an off-site, permitted TSDF for further treatment or disposal.

J-4a(3)(c) Decontamination of large miscellaneous handling equipment with internal or complicated external parts

All large equipment with internal and/or complicated external parts that contact waste will be decontaminated in accordance with the following procedures.

1. Surfaces will be scraped, sandblasted, brushed, or swept to remove all loose or caked residue. Surfaces will then be triple rinsed. The first wash/rinse will be performed with a high-pressure stream of steam or water with suitable detergents or other cleaning additives. The second wash/rinse will be performed using clean water with cleaning additives. Accumulated solids and liquids from the two first washes will be handled in accordance with section J-4b of this closure plan. The third wash/rinse will be performed with clean water.

2. The equipment will be visually inspected after the triple wash/rinse to assess the presence of visual residue. If necessary the facility will repeat all, or part, of the above procedures.

3. If visible contamination remains, go to Step 6 below. If no visible contamination remains, the facility will take a representative sample of the rinse water from the final rinse of each hazardous waste management unit. These samples will be analyzed for total concentrations of all constituents identified in Appendix A – Laboratory Analytical Method Detection Limit (MDL) located in Appendix J-C of this section..

4. Prior to use, a representative sample of the tap water utilized in the clean up, will be analyzed as a blank for the same parameters as the closure samples. If KDHE approves the use of this water, corresponding detectable chemicals of concern from compound table in Appendix J-A may be deducted from the analytical results from each final rinse sample as correction factors (e.g. if tap water sample has 0.1 ug/l 2,4,-D and the rinse water is 0.2 ug/l 2,4,-D, we would subtract 0.1ug/l from the rinse water and get a final value of 0.1ug/l 2,4-D) Use of tap water analytical results as correction factors is subject to prior KDHE approval
5. A unit will be considered decontaminated when the rinsate sample analysis results are lower than the Tier 2 risk based standards for non-residential ground water found in KDHE's guidance document, "Risk Based Standards for Kansas (RSK)", 2010 or the analytical detection level if there is not a corresponding RSK standard.

6. If after performing the above rinsing procedures, the equipment can not be decontaminated, the equipment will be transported by a licensed/permitted hauler to an off-site, permitted TSDF for further treatment or disposal. Equipment disposed in a landfill will meet the applicable Land Disposal Restriction (LDR) standards of 40 CFR 268.

J-4a(4) Disposal of Cleanup Equipment/Clothing and Residue

a. All contaminated equipment used during the cleanup that can't be decontaminated, such as shovels, dustpans and brooms, are shipped to approved KDHE/EPA-disposal facilities in DOT-approved containers or decontaminated using the triple wash/rinse method.
b. All contaminated clothing, plastic sheets, rags, etc., generated during cleanup that can't be decontaminated, are sent to KDHE/EPA-approved disposal facilities in DOT approved containers.
c. All hazardous waste residues from the cleanup of areas and equipment will be sent to KDHE/EPA-approved disposal facilities in DOT approved containers.

J-4b Hazardous Waste Handling Procedures

All contaminated solids, liquids, sludges, soils, and debris generated by the closure process will

be managed in accordance with applicable regulations as site generated solid waste (i.e., Clean Harbors Kansas, LLC is the generator). Generated wastes meeting the definition of "hazardous waste" under 40 CFR 261.3 will be handled in the manner discussed below.

Site-generated hazardous wastes may be stored on-site in containers, existing tanks, or temporary portable tanks prior to treatment or removal from the facility. The wastes may be treated on-site in accordance with the facility's RCRA/HSWA permit. A temporary storage area may be developed for storage of these generated wastes, and if so, wastes will be stored in this area for less than ninety days. These wastes will then be transported to a permitted off-site Treatment, Storage, or Disposal Facility (TSDF) by a permitted hazardous waste hauler for appropriate disposal or further treatment (e.g. landfill, deep-well injection, incineration, cement kiln, recycling facility).

J-5 Maximum Extent of Operations

Table J.1 lists all existing hazardous waste management units at the Clean Harbors Kansas, LLC facility. This table represents the maximum extent of operations that are currently planned to exist at this facility.

J-6 Maximum Waste Inventory

The maximum inventory of wastes in storage exists when all hazardous waste management units contain their maximum permitted capacity of waste. The facility's potential maximum waste inventory is 260,259 gallons.[a]

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[a] The maximum waste inventory was calculated by adding S01 (storage in containers) and S02 (storage in tanks) in the Part A permit application.

174,570 gallons (S01) + 85,689 gallons (S02) = 260,259 gallons

J-7 Schedule for Final Closure

Table J.3, Closure Activity Schedule - Final Facility Closure outlines the anticipated schedule for closing the Clean Harbors Kansas, LLC facility. The schedule assumes that all hazardous waste management units identified in this plan (See Table J.1) will be closed.

During final closure, hazardous waste management units may be closed simultaneously or sequentially. Also, a temporary storage area may be developed for storage of wastes which are generated on-site during closure activities, and if so, wastes will be stored in this area for less than ninety days in appropriate containers or temporary tanks.

J-7a Expected Year of Final Closure

Clean Harbors Kansas, LLC does not expect to close the facility prior to the permit expiration (i.e., ten years after the effective date of the permit). Since the facility does not consist of disposal units such as landfills or surface impoundments, capacity restraints (such as landfill capacity) do not exist to force facility closure. Therefore, Clean Harbors Kansas, LLC will not estimate the year of final closure [per 40 CFR 264.112(b)(7)].

J-8 Closure Plan Amendment

Clean Harbors Kansas, LLC maintains a copy of the closure plan at the facility. Clean Harbors Kansas, LLC will submit a written request for approval to change the closure plan, in accordance with 40 CFR 264.112(c) and 40 CFR 270.42, whenever one of the following occurs.

1. Changes in operating plans or facility design affect the closure plan.

2. Change in the estimated year of final closure (see section J-7a).

3. In conducting partial or final closure activities, unexpected events occur which affect the closure plan.

This notification will include a copy of the amended closure plan for review or approval by KDHE. It will be submitted at least 60 days prior to the proposed change in facility design or operation, or no later than sixty days after an unexpected event has occurred which has affected the closure plan. If an unexpected event occurs during the partial or final closure period, Clean Harbors Kansas, LLC will submit the notification or request no later than 30 days after the unexpected event's occurrence.

J-9 Individual Unit Closures

This section details the closure procedures of each individual hazardous waste management unit. During final facility closure and partial facility closure, each hazardous waste management unit will be closed in accordance with this section.

J-9a Individual Hazardous Waste Management Unit (HWMU) Closure

Partial facility closure (closure of an individual hazardous waste management unit), may be necessary during the active life of the facility. If a management unit must be closed during the active life of the facility, it will be closed in accordance with this section (J-9a). At final closure of a management unit, all hazardous waste and hazardous waste residues will be removed from the containment system. Remaining containers, liners, bases, and soil containing or contaminated with hazardous waste or hazardous waste residues will be either decontaminated or removed.

J-9a (1) Process and Unit Description

The Hazardous Waste management units at the Clean Harbors Kansas, LLC facility are used for storing and staging containers of hazardous and non-hazardous wastes. The management units may also be used for the treatment of hazardous waste in containers. The wastes managed in these areas include liquids, sludges, and solids and are managed in containers of varying sizes. The CHK facility manages containerized waste in four management areas, each roofed and constructed with concrete diking to minimize run-on and run-off. These buildings are divided into independently contained sub-areas. The maximum total permitted storage capacity of the management units on site is approximately 174,570 gallons. Figure J.1, Material Containment Areas depicts the location of each CMU at the facility; Section D of this permit application describes each area in more detail.

J-9a(2) Unit Closure Procedures

For the purposes of this closure plan, each Hazardous Waste management unit includes the following structures/equipment:

- Containers, drums, pallets, marino bags, etc., and associated hazardous wastes, waste residues and constituents.
- All associated secondary containment structures (concrete pads, curbs, ramps, etc.).
- Associated equipment (e.g., conveyors, etc.).

Clean Harbors Kansas, LLC will close all HWMUs at the facility as follows.

1. If modifications to the closure plan are desired and have not been previously approved in accordance with 40 CFR 270.42 and 264.112, the modified portions of the plan will not be implemented until approval by KDHE or other authorized agencies has been received.

2. Clean Harbors Kansas, LLC will close the CMU(s) in accordance with the schedule outlined in Table J.4, Closure Activity Schedule - Container Management Unit (CMU) and discussed in Section J-9a(3) of this closure plan.

3. Within ninety days after receiving the final volume of hazardous wastes at the CMU(s), Clean Harbors Kansas, LLC will remove all waste inventory and portable equipment from the area unless an extension has been requested and approved in accordance with 40 CFR 264.113(a). All waste inventories will be either treated on-site in accordance with the facility's RCRA/HSWA permit or transported to a permitted TSDF for off-site

management. Clean Harbors Kansas, LLC will attempt to empty all drums to the extent described by 40 CFR 261.7(b) to satisfy the requirements for the exemption as defined by 40 CFR 261.7(a)(1). The successfully emptied drums will be transported to an off-site industrial waste disposal facility or a permitted RCRA/HSWA TSDF for disposal. If a container cannot be emptied to meet the definition in 40 CFR 261.7(b), then the container will be transported by a licensed hazardous waste hauler to a permitted off-site RCRA/HSWA TSDF for management.

4. All contaminated equipment, structures, and secondary containment systems will be:

   A. Dismantled and disposed as hazardous waste at a RCRA/HSWA permitted off-site disposal facility, or

   B. Decontaminated in accordance with Section J-4a and disposed of at a solid waste landfill, or

   C. Decontaminated in accordance with Section J-4a and either salvaged for future use or left in place.

   D. Successfully decontaminated equipment may be transferred to another TSDF for use.

5. Clean Harbors Kansas, LLC will visually inspect the surface soils around the CMU(s). Any visible evidence of contamination will be evaluated for hazardous constituents and (if contamination is present) subsequently removed for proper management in accordance with Section J-4a of this closure plan.

   At final closure, the soil beneath the containment systems of all hazardous waste management systems, including buildings, will be closed in accordance with Section J-4a of this closure plan.

6. All wastes generated on-site from closure activities will be handled in accordance with Section J-4b of this closure plan.

7. Clean Harbors Kansas, LLC will complete closure activities within 180 days after receiving either the final volume of hazardous wastes or closure plan approval by the agency, unless an extension has been requested and approved in accordance with 40 CFR 264.113(b).

8. The HWMUs are not disposal units. Also, all hazardous wastes and hazardous waste constituents will be removed from the CMU during closure and all structures will be decontaminated in accordance with this closure plan. If clean closure is not achieved, the facility will submit a post-closure plan to the regulatory authority.

J-9a(3)Unit Closure Schedule

Table J.4 outlines the anticipated schedule for the individual closure of a container management unit at the Clean Harbors Kansas, LLC facility. During final closure of the facility, all HWMUs may be closed simultaneously and in accordance with the schedule presented in Table J.3.

J-9b Tank System Closure

Partial facility closure (closure of an individual hazardous waste management unit) may be necessary during the active life of the facility. If a tank or tank system must be closed during the active life of the facility, it will be closed in accordance with this section (J-9b). At closure of a tank or tank system, all hazardous waste and hazardous waste residues will be removed from the tank/tank system. Tanks, ancillary equipment, liners, bases, and soil containing or contaminated with hazardous waste or hazardous waste residues will be either decontaminated or removed.

J-9b(1) Process and Unit Description

Tank systems at the Clean Harbors Kansas, LLC facility include storage/treatment tanks; the maximum permitted storage capacity of tanks on site is 85,689 gallons. The storage/treatment tanks have several uses at the Clean Harbors Kansas, LLC facility, some of which are discussed below.

- Solvent and solid waste streams are blended, accumulated, and stored in tanks prior to being transported to an off-site cement kiln to be burned as an alternative fuel.

- Other wastes are received from generators either in drums or bulk and are transferred to tanks to await transportation to an off-site reclamation facility, incinerator, deep-well injection facility, landfill or other permitted TSDF.

The tanks used at Clean Harbors Kansas, LLC vary in size. All tanks utilized for hazardous waste management are equipped with a manual gaging port and high level alarms to minimize the potential for overflow. All hazardous waste management tanks operating under this permit have secondary containment designed, installed, and operated to prevent migration of wastes or accumulated liquid to the environment. These containment systems, consisting of concrete slabs surrounded by concrete walls or dikes of varying height, enable the detection of and collection of releases and accumulated liquids. The concrete containment liner is also maintained free from cracks and gaps.

These tanks are summarized in Table J.1. In addition, Figure J.2, Tank Locations, shows the location of each tank system at the facility. Section E of this permit application describes the tank systems in more detail. The tank systems are designed, constructed, and operated in accordance with 40 CFR 264.190 through 199.

J-9b(2) **Unit Closure Procedures**

For the purposes of this closure plan, each tank system includes:

- Tanks and associated hazardous wastes, waste residues and constituents;
- All ancillary equipment including, but not limited to, piping, fittings, flanges, valves, and pumps; and
- All associated secondary containment structures (concrete pads, curbs, ramps, etc.).

1. Each management unit containment area will be mapped with a grid system. A 25' x 25' grid will be used in material storage areas and a 15' x 15' grid will be used in material processing areas. A soil sample will be taken in the center of each grid. If necessary, concrete borings will be done to sample each required location. Additionally, if a crack exists, a sample will be collected under the crack every 10'. (Note: This does not apply to surface cracks) A sample will also be collected under every sump.

2. Collect samples at soil interface beneath the concrete surface and below the underlying subgrade rock where rock exists. and analyze using SW-846 standard methods for the parameters identified in Appendix A. Borings for soil samples in non active containment areas will remain open until any additional sampling required by the EPA or KDHE for closure or corrective action purposes at that location has been completed.

3. Proper QA/QC procedures will be followed to control the potential loss of VOCs during sampling and transport.

4. For closure, soil will be considered clean for closure when results of sample analyses are at or below the Tier 2 risk based standards for non-residential soil pathway ,or the Residential Soil to Ground water pathway, whichever is lower found in KDHE's guidance document, "Risk Based Standards for Kansas (RSK)", 2010.

5. If large areas of soil contamination, in excess of closure standards, are identified, a project specific assessment and cleanup plan will be prepared and submitted to the KDHE for approval and subsequent implementation. This will be done in accordance with the permit modification procedures of 40 CFR 270.42. Alternatively, this may be addressed in the site's corrective action program if formally deferred to the corrective action process by the regulatory agencies..

6. KDHE can ask for additional soil samples at any location and depths within the regulatory unit, if staining of soil or other indications of contamination are present.

The tank units at the Wichita facility may undergo periodic changes and upgrading in order to accommodate required regulatory and capacity changes and improvements in technology. Also, CHK will replace tanks if they become unfit for use.

J-9b (2)(a) **Tank Closure Procedures**

Clean Harbors Kansas, LLC will close all tanks and/or tank systems at the facility as follows.

1. If modifications to the closure plan are desired and have not been previously approved in accordance with 40 CFR 270.42 and 264.112, the modified portions of the plan will not be implemented until approval by KDHE or other authorized agencies has been received.

2. Clean Harbors Kansas, LLC will close the tanks and/or tank systems in accordance with the schedule outlined in Table J.5, Closure Activity Schedule - Tanks and Tank Systems and as discussed in Section J-9b(3) of this closure plan.

3. Within ninety days after receiving the final volume of hazardous wastes into the tank/tank system, Clean Harbors Kansas, LLC will remove all waste inventory from the unit(s) unless an extension has been requested and approved in accordance with 40 CFR 264.113(a). All waste inventories will be either treated on-site in accordance with the facility's RCRA/HSWA permit or transported to a permitted TSDF for off-site management.

4. All tanks, ancillary equipment, structures, and secondary containment systems (when applicable) will be:

   A. Dismantled and disposed of as hazardous waste at a RCRA/HSWA permitted off-site disposal facility, or

   B. Decontaminated in accordance with Section J-4a and disposed of at a solid waste landfill, or

C. Decontaminated in accordance with Section J-4a and either salvaged for future use or left in place.

D. Successfully decontaminated equipment may be transferred to another TSDF for use.

5. This step applies only when closing an entire tank system, including its secondary containment. If only closing a tank unit, go to Step 6 below. When closing a tank system, CHK will visually inspect the surface soils around the tank system containment area. In accordance with Section J-4a of this closure plan, any visible evidence of contamination will be evaluated for hazardous constituents and, if contamination is present, subsequently removed for proper disposal or other appropriate off-site management.

   At final closure, the soil beneath the secondary containment systems will be closed in accordance with Section J-4a of this closure plan.

6. All wastes generated on-site from closure activities will be handled in accordance with Section J-4b of this closure plan.

7. Clean Harbors Kansas, LLC will complete closure activities within 180 days after receiving either the final volume of hazardous wastes into the tank unit(s) or closure plan approval from the agency, whichever is later, unless an extension has been requested and approved in accordance with 40 CFR 264.113(b).

8. The tank systems are not disposal units, and they have secondary containment meeting the requirements of 40 CFR 264.193(b) through (f). Also, all hazardous wastes and hazardous waste constituents will be removed from the tanks/tank systems during closure and all structures will be decontaminated in accordance with this closure plan. If clean closure is not achieved, the facility will submit a post-closure plan to the regulatory

authority.

J-9b(3) Unit Closure Schedule

Table J.5 outlines the anticipated schedule for the individual closure of a tank/tank system at the Clean Harbors Kansas, LLC facility. During final closure of the facility, all HWMUs may be closed either sequentially or simultaneously and in accordance with the schedule presented in Table J.3.

J-10 Financial Requirements

Closure costs are estimated in Appendix J-B, Closure Cost Estimate.

Financial requirements for hazardous waste TSDFs are addressed in Section K, Financial Requirements of this document.

J-11 Certification of Closure

Within 60 days of final closure completion, Clean Harbors Kansas, LLC will submit, either by hand delivery or by registered mail, a certification of closure to KDHE and to the Regional Administrator of the USEPA, Region 7 per 40 CFR 264.115. The certification will be signed by CHK, as the owner/operator of the facility and by an independent Kansas registered professional engineer attesting that the units were closed in accordance with this closure plan.

J-12 Closure Report

Within 60 days of final closure completion, Clean Harbors Kansas, LLC will submit, either by hand delivery or by registered mail, the Closure report to KDHE and to the Regional Administrator of the USEPA, Region 7 . The final closure report will include the following as applicable to each area being closed:

- Site history information;
- A map of the site indicating the location of the units being closed;
- Visual observation made at the time of closure with respect to condition of the units;

- Documentation of the methods used to clean/decontaminate the units;
- Photographs associated with the closure of the units (before, during, and after closure) used in conjunction with written documentation;
- The volume of waste and waste residue removed, including the waste (residue) resulting from decontamination activities;
- A description of the method of waste handling and transport;
- Waste manifest numbers or copies of manifests from the removal of waste and waste residues;
- A description of the sampling and analytical methods used, including sample preservation and chain of custody methods;
- Laboratory records;
- A narrative description of the closure field tasks performed;
- A chronological field log of closure activities;
- Tests performed and methods;
- Location of the sampling points;
- Results of laboratory analyses, summarized in a tabular format and with the laboratory reports as an appendix;
- Documentation of off-site disposal for any materials taken off-site; and,
- A brief description of the current regulatory status and operations at the site
- A comparison of the results of laboratory analyses with the performance standards for clean closure

APPENDIX J-A

TABLES

TABLE J.1

MAXIMUM EXTENT OF OPERATIONS

CLEAN HARBORS KANSAS, LLC - HAZARDOUS WASTE MANAGEMENT UNITS

HWMU[b]	UNIT	Wastes Stored/Function
C	Building C	Hazardous waste - Container Management
C	Building I	Hazardous waste - Container Management
C	Processing Area	Hazardous waste - Container Management
C	Drum Dock	Hazardous waste - Container Management
T	V-1	Hazardous Waste Liquid
T	V-2	Hazardous Waste Liquid
T	V-3	Hazardous Waste Liquid
T	V-4	Hazardous Waste Liquid
T	V-5	Hazardous Waste Liquid
T	V-6	Hazardous Waste Liquid
T	V-7	Hazardous Waste Liquid
T	V-8	Hazardous Waste Liquid

[b] HWMU - Hazardous Waste Management Unit - All HWMUs at the HRI Wichita facility are either Container Management Areas (C) or Tanks/Tank Systems (T) as defined by 40 CFR 260.10. The unit closure procedures for these units are detailed in Section J-9a and Section J-9b respectively.

TABLE J.3

CLOSURE ACTIVITY SCHEDULE - FINAL FACILITY CLOSURE

Calendar Days Lapsed	Closure Activity
-45	Notification to KDHE or the EPA Region 7 Administrator.
0	Receipt of known final volume of hazardous waste or receipt of final closure plan approval from agency (whichever is later). Begin work-force mobilization.
	Begin treatment and removal of tank waste inventory.
	Begin treatment and removal of container waste inventory.
90	Complete treatment and removal of all hazardous waste inventories.
120	Complete decontamination of tanks, container management units and miscellaneous units.
150	Complete dismantling/removal of all generated wastes, temporary storage units, and decontaminated tanks, equipment, and structures (if removal is necessary).Collect and analyze rinsate and soil samples.
	Visually inspect surface soils for contamination and begin remediation procedures if necessary.
180	Complete final closure activities.
200	Inspection of facility by a Professional Engineer.
240	Submit a certification of closure to KDHE or the EPA Region 7 Administrator.

TABLE J.4

CLOSURE ACTIVITY SCHEDULE - Hazardous Waste Management UNIT

Calendar Days Lapsed	Closure Activity
0	Receipt of known final volume of hazardous waste into the container management unit or receipt of closure plan approval from agency (whichever is later). Begin work-force mobilization. Begin treatment and removal of waste inventory.
90	Complete treatment and removal of all hazardous waste inventories.
120	Complete emptying all drums and removal of drums from facility.
150	Complete decontamination of secondary containment structures and hazardous waste handling equipment. Visually inspect surface soils for contamination and begin remediation procedures if necessary.
180	Complete final closure activities.

TABLE J.5

CLOSURE ACTIVITY SCHEDULE - TANKS AND TANK SYSTEMS

Calendar Days Lapsed	Closure Activity
0	Receipt of known final volume of hazardous waste or receipt of closure plan approval from agency (whichever is later). Begin work-force mobilization. Begin treatment and removal of tank waste inventory.
90	Complete treatment and removal of all hazardous waste inventories.
120	Complete decontamination of tanks, ancillary equipment, and secondary containment systems (when applicable).
150	Complete dismantling/removal of decontaminated tanks, equipment, and secondary containment structures (when removal is necessary). Visually inspect surface soils for contamination and begin remediation procedures if necessary. Collect and analyze soils and rinsate samples
180	Complete final closure activities.

APPENDIX J-B

CLOSURE COST ESTIMATE

Summary - Closure Cost Estimate
Clean Harbors Kansas, LLC
Wichita, Kansas

The following table is a summary of the cost for closing the Clean Harbors Kansas, LLC facility. The figures for closing the facility are set forth assuming the plant has the maximum storage of hazardous waste. The Closure Cost Estimate has been prepared in accordance with 40 CFR 264.142 (Cost Estimate for Closure). Cost estimate calculations are attached.

Cost	Section
$194,771.89	Waste Disposal of Maximum Inventory
$10,945	Tank Decontamination
$3,592	Equipment Decontamination
$69,626	Assessment of Soil
$46,778	Decontaminate Concrete
$9,000	Closure Certification
$334,712	Subtotal
$50,206	Contingency 15%
$384,918	**Total Closure Cost Estimate**

Clean Harbors Kansas, LLC
RCRA Permit Application
Section J-A
Closure Plan
Appendix J-B - Closure Cost Estimate

1.0 MANAGMENT OF HAZARDOUS WASTE INVENTORY

Maximum container storage is as follows:

Storage Building	Area (ft^2)	Capacity (gallons)	Drum Equiv. (55 gal)
Processing Area	6278	9900	180
Building C	13520	99110	1802
Drum Dock	2880	14980	272
Building I	5250	50,600	920
Total	22678	123990	2254

Maximum tank storage is as follows:

Tank	Capacity (gal)
V1	7181
V2	7084
V3	7181
V4	7181
V5	20095
V6	20095
V7	7181
V8	7181
Total	83179

Container Management Unit area for soil sampling

Unit Designation	Area (ft^2)	# Sumps/ unit	# Soil Samples Required
Building I	5250	1	9
Building J	6400	1	11
Building D	10800	5	22
Building C	13520	0	22
Building B	7600	2	14
Processing Area	6278	3	31
Drum Dock	2880	0	5

1.1 Transportation and Disposal Unit Prices

The following treatment/disposal facilities and costs were used to calculate the closure cost estimate. These figures represent third party transportation and disposal costs as of May 2012. Based on historical averages, the following types and amounts of wastes are expected to be on-site at closure.

Waste Type	Disposal Outlet	Transportation Cost	Disposal Cost	T&D Total Cost
Landfill	EQ- Detroit Michigan	$50/DM	$125/DM	$175/DM
Fuels	Systech – Fredonia KS	$0.10/gal	$0.12/gal	$0.22/gal
Fuels	Systech – Fredonia KS	$5.55/DM	$55/DM	$60.55/DM
Incineration	WTI- East Liverpool, OH	$0.90/gal	$0.28/gal	$1.18/gal
Deepwell	Texas Molecular – Deer Park, TX	$0.56/gal	$0.38/gal	$0.94/gal

Drum Disposal Method	Percentages	# drums	# gallons
Liquid Fuel	30	952	52360
Solid Fuel	20	635	NA
Incineration	30	952	52360
Deepwell	20	635	34925
Tank Disposal Method			
Liquid Fuel	55	NA	46628
Incineration	20	NA	16955
Deepwell	25	NA	21196